08-27-01

`Atty. Docket No.: 9409/2023C

PATENT

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

jc796 U.S. PTC

Application of: Serial No.:

Samson et al

Not yet assigned

Filed:

August 24, 2001

Ref. No.:

9409/2023C

Entitled:

"Active and Inactive CC-Chemokine

Receptor and Nucleic Acid

Molecules Encoding Said Receptor"

Examiner:

Not yet assigned

Group Art Unit:

Not yet assigned

Conf. No.:

Not yet assigned

### **CERTIFICATE OF EXPRESS MAILING**

I hereby certify that the papers attached hereto are being deposited with the United States Postal Service using Express Mail to Addressee service, Express Mail No. EL728730750US on this date, August 24, 2001, postage prepaid under 37 C.F.R. Section 1.10 in an envelope addressed to Box Patent Application Commissioner for Patents, Washington, D.C. 20231.

Kathleen M. Williams

Name of Person Mailing Paper

Signature of Person Mailing Paper

Box: Patent Application Commissioner for Patents Washington, D.C. 20231

#### TRANSMITTAL LETTER

Enclosed for filing the above-identified patent application, please find the following documents:

- 1. New Patent Application Transmittal (3 pages);
- 2. Patent Application Specification, (49 pages);
- 3. (14) sheets of informal drawings;
- 4. Application Data Sheet (3 pages);
- 5. Preliminary Amendment (4 pages) including marked up version of page 1 of Specification showing changes being made (2 pages);
- 6. Copy of Declaration and Power of Attorney from Parent Application U.S.S.N. 09/626,939 (4 pages);
- 7. Paper copy of Sequence Listing (15 pages);
- 8. Check in the amount of \$355.00; and
- 9. Return Post-Card.

The Commissioner for Patents is hereby authorized to charge any additional fees or credit any overpayment in the total fees to Deposit Account No. 16-0085, Reference 9409/2023C. <u>A duplicate of this transmittal letter is enclosed for this purpose.</u>

Date: August 24, 2001

Respectfully submitted,

Name: Kathleen M. Williams Registration No.: 34,380 Palmer & Dodge LLP One Beacon Street Boston, MA 02108

Tel: 617-573-0667

### NEW UNITED STATES UTILITY PATENT APPLICATION TRANSMITTAL

Atty. Docket No.: 9409/2023

<b>CERTIFICATE</b>	OF MAILING	UNDER 37	CFR 1.10

I hereby certify that the paper (and any paper or fee referred to as being enclosed) is being deposited with the United States Postal Service using Express Mail to Addressee Service, under 37 C.F.R. Section 1.10, Express Mail Label No. EL728730750US on this date, August 24, 2001, postage prepaid, in an envelope addressed to Box: Patent Application, Commissioner for Patents, Washington, D.C. 20231.

Kathleen M. Williams

Name of Person Mailing Paper

Signature of Person Mailing Paper

Commissioner for Patents Box Patent Application Washington, D.C. 20231

•	Enclosed herewith is a new patent application of:								
	First Named Inventor (or application identifier): Michel Samson								
orandonia.			active and Inactive CC-Chemokine Rece Encoding Said Receptor	ptor and Nucleic Acid Molecules					
Type:		New Continuation of:							
u. Fi	Continuation-in-Part of:								
es Al	☐ Divisional of: U.S.S.N. 09/626,939 filed July 27, 2000								
	and includes the following papers:								
1. =	$\boxtimes$	Specification $\underline{49}$ pages (including specification, claims, abstract)/ $\underline{/ L}$ claims ( $\underline{1}$ independent) after Preliminary Amendment							
Type:		Declaration/Power of Attorney is:  attached executed unexecuted  NOT included, but deferred under 37 C.F.R. § 1.53(f).							
13.	$\boxtimes$	14 Distinct sheets of  Formal  Informal Drawings							
<b>4</b> .	$\boxtimes$	Preliminary Amendment.							
5.		Information Disclosure Statement  Form 1449  A copy of each cited prior art reference							
6.		Assignment with Recordation Cover Sheet.							
7	$\boxtimes$	Priority is hereby claimed under 35 U.S.C. § 119 based upon the following application(s):							
		Country	Application Number	Date of Filing (day, month, year)					
		EP	EP 96870021.1	1, March, 1996					
		EP	EP 96870102.9	6, August, 1996					

## Atty. Docket No.: 9409/2023C

8. Priority is hereby claimed under 35 U.S.C. § 121 based upon the following application(s):

	Country	Application 1	lumber	Date of Filing (day, month, year)				
	US	09/626,9	39	27, July, 2000				
	Priority is hereby claimed under 35 U.S.C. § 120 based upon the following application(s):							
	US	08/833,752 9, Apr		9, April	1997			
9.	Priority document(s).							
10.	Statement of Small En	tity Status, Pursuant to 3	37 C.F.R. §1.27.					
11.	Microfiche Computer Program (Appendix).							
12 🖾	Nucleotide and/or Amino Acid Sequence Submission.  Request for transfer of computer readable copy from 09/626,939 to present application.  Paper Copy (identical to computer copy).  Statement verifying identity of above copies.							
13	Request for Non-Publicat	ion and Certification un	der 35 USC 122	(b)(2)(B)(i	)			
14. Calculation of Fees:								
TÖTAL EXCESS FEES FOR CLAIMS CLAIMS FEE AMOUNT DUE								
Basic Filing F	ee (37 C.F.R. § 1.16(a))					\$710.00		
Total Claims	in Excess of 20 (37 C.F.R.	§ 1.16(c))	. 16	0	\$18.00	0.00		
Independent (	Claims in Excess of 3 (37 C	.F.R. § 1.16(b))	1	0	\$80.00	0.00		
Multiple Depo	endent Claims (37 C.F.R. §	1.16(d))	NO		\$270.00			
Subtotal - Fili	ng Fee Due					\$710.00		
Reduction by 50%, if Small Entity (37 C.F.R. §§ 1.9, 1.27, 1.28)  MULTIPLY BY 0.50					\$355.00			
TOTAL FILING FEE DUE								
Assignment R	Recordation Fee (if applicabl	e) (37 C.F.R. § 1.21(h))	0		\$40.00			
GRAND TOTAL DUE					\$355.00			
15. PAYMENT is:								

### NEW UNITED STATES UTILITY PATENT APPLICATION TRANSMITTAL

Atty. Docket No.: 9409/2023C

16. All correspondence for the attached application should be directed to:

Kathleen M. Williams Customer Number 27495

17. Other: Application Data Entry Sheet, Marked Up Version of Page 1 of Specification showing changes being made.

By:

Respectfully submitted,

Date: August 24, 2001

Name: Kathleen M. Williams Registration No.: 34,380 VANMA51,001C1 PATENT

# ACTIVE AND INACTIVE CC-CHEMOKINE RECEPTOR AND NUCLEIC ACID MOLECULES ENCODING SAID RECEPTOR

# METHODS FOR IDENTIFYING COMPOUNDS WHICH BIND THE ACTIVE CCR5 CHEMOKINE RECEPTOR-

### **BACKGROUND**

This is a continuation application under 37 CFR 1.53 OF U.S. Patent Application No. 08/810,028 filed March 3, 1997.

### **RELATED APPLICATIONS**

This application claims priority under 35 U.S.C. § 120 to U.S. Patent Application Serial No. 09/626,939, filed July 27, 2000, which claims priority under 35 U.S.C. § 120 to U.S. Patent Application Serial No. 08/833,752, filed April 9, 1997, which claims priority under 35 U.S.C. § 119(a)-(d) to EP 96870021.1, filed March 1, 1996, and EP 96870102.9, filed August 6, 1996.

### Field of the Invention

The present invention concerns new peptides and the nucleic acid molecules encoding said peptides, the vector comprising said nucleic acid molecules, the cells transformed by said vector, inhibitors directed against said peptides or said nucleic acid molecules, a pharmaceutical composition and a diagnostic and/or dosage device comprising said products, and non human transgenic animals expressing the peptides according to the invention or the nucleic acid molecules encoding said peptides.

The invention further provides a method for determining ligand binding, detecting expression, screening for drugs binding specifically to said peptides and treatments involving the peptides or the nucleic acid molecules according to the invention.

### Technological Background of the Art

Chemotactic cytokines, or chemokines, are small signalling proteins that can be divided in two subfamilies (CC- and CXC-chemokines) depending on the relative position of the first two conserved cysteines. Interleukin 8 (IL-8) is the most studied of these proteins, but a large number of chemokines (Regulated on Activation Normal T-cell Expressed and Secreted